#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE	)
COMMISSION OF THE APPLICATION OF THE	)
FUEL ADJUSTMENT CLAUSE OF BIG RIVERS	) CASE NO. 94-458-A
ELECTRIC CORPORATION FROM	j ,
NOVEMBER 1, 1994 TO APRIL 30, 1995	)

#### ORDER

This case involves a review of the operation of the fuel adjustment clause ("FAC") of Big Rivers Electric Corporation ("Big Rivers") for the six-month period ending April 30, 1995. Based upon its review, the Commission finds that Big Rivers (1) properly determined the fuel costs charged to its native load customers; (2) properly allocated fuel cost refunds; (3) incorrectly calculated and applied prospective disallowances of fuel charges incurred under Contract No. 527; and (4) charged \$414,966 of unreasonable fuel costs to its native load customers during the review period because of its incorrect calculations.<sup>2</sup>

Commission Regulation 807 KAR 5:056, Section 1(12), requires the Commission to conduct public hearings on a utility's past fuel adjustments at six (6) month intervals. It further requires the Commission to order a utility to charge off and amortize, by means of a temporary decrease of rates, any adjustments which it finds unjustified due to improper calculation or application of the charge or improper fuel procurement practices.

Kentucky Industrial Utility Customers ("KIUC") and the Attorney General intervened in this proceeding. On October 31, 1995, the Commission held a public hearing in this matter. On January 8, 1996, after the submission of post-hearing briefs, this matter stood submitted for decision.

#### Fuel Cost Determination

Kentucky Industrial Utility Customers ("KIUC") contends that Big Rivers' methods for fuel cost allocation and for plant dispatching are unreasonable. To remedy this situation, it proposes that Big Rivers assign system average fuel costs to all sales. With this pricing methodology, KIUC contends, all customers will be treated in the same manner. Its proposed allocation method is somewhat similar to the methodology Big Rivers used during most of the review period when it experienced problems with its new energy management system.<sup>3</sup>

The record fails to support KIUC's contentions. Big Rivers uses system average fuel cost to allocate fuel costs among its native load customers and firm off-system customers. It uses incremental costs,<sup>4</sup> however, to allocate fuel costs to non-firm off-system sales.

Given the nature of non-firm, off-system sales, this method is reasonable. Non-firm off-system sales are "sales of energy made using power sources that at the time of delivery are not being fully used, with such energy being used by the receiver to reduce generation

The additional costs incurred from the production or delivery of an additional unit of utility service, usually the minimum capacity or production that can be added. The additional cost divided by the additional capacity or output is defined as the incremental cost.

P.U.R. Glossary For Utility Management 75 (Public Utilities Reports, Inc. 1992)

Because of problems with its Energy Management System, Big Rivers used daily average fuel costs as a proxy for incremental costs to calculate fuel costs for non-firm, off-system sales.

<sup>4 &</sup>quot;Incremental cost" is defined as:

of more expensive operating units, or to avoid curtailing deliveries to secondary or interruptible customers." P.U.R. Glossary For Utility Management 46 (Public Utilities Reports, Inc. 1992). The selling utility is under no legal or contractual obligation to make the sale for any period of time. The selling price is the "market price" which the bulk power market establishes and which is based upon the seller's marginal or incremental cost.

The Commission further finds that, given the terms of its coal supply contracts for the Wilson and Green Generating Stations, Big Rivers' dispatching methods are not unreasonable. These contracts require the purchase of baseload quantities of fuel regardless of whether the coal is used.<sup>5</sup> Big Rivers therefore dispatches these plants - its most expensive units - before dispatching its lower cost units. Native load customers thus pay the higher costs, while non-firm off-system customers are charged the lower incremental fuel costs. Because of those contracts' take-or-pay provisions, however, the incremental cost of burning their coal is zero. Burning fuel at another plant results in a higher incremental cost since Big Rivers incurs not only the cost of the take-or-pay coal but the cost of any replacement coal. While the Commission has reviewed Big Rivers' decisions to contract for these baseload quantities on several occasions.<sup>6</sup> it has yet to find

Contract No. 527 requires Big Rivers to take 1,020,000 tons annually for the Wilson Plant. Contract No. 865 requires Big Rivers to take an additional 240,000 tons for use at the Wilson Plant. Contract No. 246 requires Big Rivers to take an annual minimum delivery of 850,000 tons for the Green Plant. Contract No. 528 requires Big Rivers to take an additional 388,800 tons annually for the Green Plant.

See, e.g., Case No. 90-360-C, An Examination by the Public Service Commission of the Application of the Fuel Adjustment Clause of Big Rivers Electric Corporation from November 1, 1991 to April 30, 1992 (July 21, 1994) at 10 and 19.

these decisions to be unreasonable. Nothing within the record of this proceeding disturbs those decisions.

#### **Line Loss Allocation**

KIUC's witness alleges that Big Rivers is not including line loss in the fuel costs for non-firm off-system sales in violation of Commission Regulation 807 KAR 5:056. He further argues that this action is unreasonable and is the principal reason that non-firm, off-system customers are allocated a lower fuel cost than jurisdictional native load customers.

The record fails to support these contentions. To the contrary, it shows that, as a general policy, Big Rivers charges line losses to non-firm off-system sales. During the period when its Energy Management System was not operating, it assigned average costs, which exceeded incremental fuel costs plus line loss, to such sales.

### **Big Rivers' Recovery Request**

In its reply brief, Big Rivers requests authority to assess an additional \$544,481 in fuel charges to jurisdictional customers through its FAC.<sup>7</sup> Its request is based upon calculations conducted five months after the review period's close which show that using incremental cost to allocate fuel costs would reduce the level of fuel costs allocated to non-firm off-system sales by \$544,481.<sup>8</sup> Stated another way, Big Rivers believes that native load customers were undercharged for the cost of fuel provided.

The Commission denies this request for three reasons. First, Big Rivers has failed to show that the daily average cost methodology it employed is unreasonable. In its

Reply Brief of Big Rivers at 10.

Big Rivers' Response to KIUC's Data Request, Item No. 7.

previous review of Big Rivers' FAC,<sup>9</sup> the Commission implicitly found that, when Big Rivers experienced problems with its Energy Management System, its use of average daily cost as a substitute for incremental cost pricing was reasonable. Big Rivers has introduced no evidence to disturb this finding.

Second, the Commission will not permit Big Rivers to game the process. Big Rivers chose to assign average costs to non-firm, off-system sales as a proxy for incremental costs to ensure that native load customers paid fuel charges no greater than those that would have been charged had the utility's Energy Management System been operational. Given its dispatching constraints, Big Rivers knew that the use of average cost pricing for non-firm, off-system sales would result in lower fuel costs for native load customers. Having made its decision, Big Rivers must face the consequences of that decision. It may not switch pricing methodologies retroactively merely because one is more profitable.

Finally, Big Rivers' request is untimely. It comes after all evidence has been heard and initial briefs submitted. No intervenor has had the opportunity to either review or respond to Big Rivers' request.

#### Allocation of Fuel Cost Refunds

KIUC contends that Big Rivers is not in compliance with the Commission's Order of July 21, 1994 in Case No. 90-360-C which required the refund of approximately \$12.4 million of Contract No. 527 fuel costs which the Commission found unreasonable. KIUC argues that such refunds should be allocated between jurisdictional and non-jurisdictional

Case No. 94-458, An Examination by the Public Service Commission of the Application of the Fuel Adjustment Clause of Big Rivers Electric Corporation From November 1, 1992 to October 31, 1994 (Mar. 5, 1996).

customers based upon their respective shares of the Wilson Generating Station's coal costs. It asserts that the use of incremental costs for non-firm, off-system sales prevents this allocation and recommends using average fuel costs to ensure that native load customers receive a proper share of the disallowed costs.

The Commission has previously addressed KIUC's arguments in Case No. 94-458. The For the same reasons as discussed in that Order, the Commission again rejects those arguments.

## Calculation and Allocation of Prospective Disallowances

In Case No. 94-458,<sup>11</sup> the Commission found that Big Rivers' methodology for calculating prospective fuel cost disallowances<sup>12</sup> failed to comply with 807 KAR 5:056. It ordered Big Rivers to change its methodology for calculating such disallowances beginning with the filing of its February 1996 FAC report. The Commission also ordered Big Rivers to recognize the impact of this change in methodology for the three months (August - October 1994) that such disallowances occurred during the review period. As Big Rivers incorrectly calculated the prospective disallowance for its fuel costs for an eighteen-month period prior to February 1996, implementing the proper methodology affects this case and will affect future FAC proceedings as well.

<sup>10</sup> Id. at 5 - 8.

<sup>11 &</sup>lt;u>Id.</u> at 9 - 11.

In Case No. 90-360-C, the Commission found that the current price which Big Rivers pays for coal received under Contract No. 527 "is unreasonable because of Amendment No. 1 to the contract and the 'Andalex Substitution Agreement." Order of July 21, 1994 at 36. It ordered that Big Rivers, when calculating its fuel cost for recovery through the FAC, reduce the price of Contract No. 527 coal to reflect cost disallowances for Amendment No. 1 and the Andalex Substitution Agreement. <a href="Id.">Id.</a>

The effect of recognizing this change is shown in Appendix A. As shown there, for the current review period, Big Rivers assessed unreasonable fuel costs of \$414,966 to its native load customers.

Pursuant to 807 KAR 5:056, the Commission may require a utility to charge off and amortize unreasonable costs by means of a temporary decrease in rates. To ensure the return of the unreasonable costs over a period of time commensurate with the period during which the costs were incurred, the Commission finds that Big Rivers should charge off and amortize the unreasonable costs of \$414,966, with interest, <sup>13</sup> over a period of six months beginning with its FAC report for the expense month of June 1996. Big Rivers should amortize and charge off the \$414,966 via a monthly credit of \$69,161, plus one-sixth of the total interest, to the fuel cost calculation contained in its FAC report.

### KIUC's Request for Interim Order

KIUC requests that this case be held open pending the outcome of related civil and criminal proceedings as well as the appeal of the Commission's July 21, 1994 Order in Case No. 90-360-C. It asserts that material information on Big Rivers' fuel procurement decisions and its fuel costs may come to light during this litigation. Issuance of an interim decision, KIUC further contends, would not prejudice any party and would avoid the necessity for continued appeals.

The Commission finds no merit to these arguments. KIUC's hope of discovering a "smoking gun" in those other proceedings is not a sufficient basis for continuing this

Interest should be based on the average of the Three-Month Commercial Paper Rate as reported in the Federal Reserve Bulletin and the Federal Reserve Statistical Release for the period November 1, 1994 to April 30, 1995. In all other respects the calculation of interest should follow the method prescribed in Case No. 90-360-C.

proceeding. For the last four years, various public agencies have scrutinized Big Rivers' fuel procurement practices. Very few areas, none of which are within the Commission's jurisdiction, remain unexplored. Concluding this proceeding best serves the public interest.

### Summary

Based on the evidence of record and being otherwise sufficiently advised, the Commission finds that during the review period Big Rivers passed through its FAC to its jurisdictional customers unreasonable fuel charges of \$414,966.

IT IS THEREFORE ORDERED that, beginning with the month of June 1996 and continuing for the following five months, Big Rivers shall credit \$69,161 plus interest to the jurisdictional fuel cost included in its FAC report as filed with the Commission

Done at Frankfort, Kentucky, this 19th day of June, 1996.

**PUBLIC SERVICE COMMISSION** 

Chairman

Vice Chairman

Chmmissioner

ATTEST:

**Executive Director** 

## **APPENDIX A**

APPENDIX TO AN ORDER OF THE PUBLIC SERVICE COMMISSION IN CASE NO. 94-458-A DATED JUNE 19, 1996.

IMPACT OF IMPLEMENTING THE PROSPECTIVE DISALLOWANCE ORDERED FOR COAL PURCHASED UNDER CONTRACT 527 BY ADJUSTING THE COST OF PURCHASES MADE UNDER CONTRACT 527 AND REFLECTING THE ADJUSTMENTS MONTHLY IN THE WILSON INVENTORY

NOVEMBER 1994 - Total Amount of Prospective Disallowance per Big Rivers' FAC Report = \$642,367

Jurisdictional Component = \$514,536

## Wilson Inventory -- November 1994 -- Per Big Rivers' Back-up Report

Beginning Inventory	<u>TONS</u> 206,674	<u>AMOUNT</u> 7,251,600	PER TON \$35.0871
Purchases (As Recorded) Adjustments	115,187 36,534	4,083,734	35.4529
Sub-total (As Recorded)	358,395	11,335,334	31.6280
Less: Amount Burned	107,690	3,406,025	31.6280
Ending Inventory	250,705	7,929,309	31.6280
Contract 527 Disallowance Pe	er Weighted Av	erage Inventory Meth	<u>od</u>
Beginning Inventory	<u>TONS</u> 206,674	AMOUNT 6,431,160 <sup>1</sup>	<u>PER TON</u> \$31.1174
Purchases (Adj) Adjustments	115,187 36,534	3,441,367 <sup>2</sup>	29.8761
Sub-total (Adj)	358,395	9,872,537	27.6264
Amount Burned (Adj)	107,690	2,975,084	27.6264
Ending Inventory (Adj)	250,705	6,897,443	27.6264
Impact on FAC Calculation (d	ollars)		
Amount Burned as Reported	by BREC		\$3,406,025
Less: Adjusted Amount Burne	ed		2,975,084
Change in the Amount Burne	d		\$ (430,941)
Less: Jurisdictional Disallowa Increase (Decrease) in Fuel C		y BREC	<u>514,536</u> \$ 83,595

Reflects the impact of the August-October 1994 inventory adjustments.

Reflects the total November disallowance of \$642,367.

## <u>DECEMBER 1994</u> - Total Amount of Prospective Disallowance Per Big Rivers' FAC Report = \$598,532 Jurisdictional Component = \$521,321

# Wilson Inventory - December 1994 - Per Big Rivers' Back-up Report

Beginning Inventory	<u>TONS</u> 250,705	AMOUNT 7,929,309	<u>PER TON</u> \$31.6280
Purchases (As Recorded)	108,703	3,810,717	35.0565
Sub-total (As Recorded)	359,408	11,740,045	32.6650
Less: Amount Burned	84,399	2,756,887	32.6650
Ending Inventory	275,009	8,983,157	32.6650
Contract 527 Disallowance Per Weighted Average Inventory Method			

Beginning Inventory	<u>TONS</u> 250,705	AMOUNT 6,897,443 <sup>3</sup>	<u>PER TON</u> \$27.6264
Purchases (Adj)	108,703	3,212,1854	29.5501
Sub-total (Adj)	359,408	10,109,628	28.1286
Amount Burned (Adj)	84,399	2,374,022	28.1286
Ending Inventory (Adj)	275,009	7,735,606	28.1286

#### Impact on FAC Calculation (dollars)

Amount Burned as Reported by BREC	\$2,756,887
Less: Adjusted Amount Burned	2,374,022
Change in the Amount Burned	\$ (382,865)
Less: Jurisdictional Disallowance Reported by BREC	521,321
Increase (Decrease) in Fuel Cost	\$ 138,456

Reflects the impact of the August-November 1994 inventory adjustments.

<sup>&</sup>lt;sup>4</sup> Reflects total December disallowance of \$598,532.

## JANUARY 1995 - Total Amount of Prospective Disallowance Per Big Rivers' FAC Report = \$616,741 Jurisdictional Component = \$515,596

## Wilson Inventory - January 1995 - Per Big Rivers' Back-up Report

Beginning Inventory	<u>TONS</u> 275,009	<u>AMOUNT</u> \$8,983,157	<u>PER TON</u> \$32.6650
Purchases (As Recorded)	111,711	4,002,779	35.8314
Sub-total (As Recorded)	386,720	12,985,936	33.5797
Less: Amount Burned	121,162	4,068,602	33.5797
Ending Inventory	265,558	8,917,334	33.5796

## Contract 527 Disallowance Per Weighted Average Inventory Method

Beginning Inventory	<u>TONS</u> 275,009	<u>AMOUNT</u> \$7,735,606⁵	<u>PER TON</u> \$28.1286
Purchases (Adj)	111,711	3,386,038 <sup>6</sup>	29.5396
Sub-total (Adj)	323,083	10,053,509	28.7589
Amount Burned (Adj)	121,162	3,484,486	28.7589
Ending Inventory (Adj)	265,558	7,637,158	28.7589

#### Impact on FAC Calculation (dollars)

Amount Burned as Reported by BREC	\$4,068,602
Less: Adjusted Amount Burned	3,484,486
Change in the Amount Burned	\$ (584,116)
Less: Jurisdictional Disallowance Reported by BREC	<u>515,596</u>
Increase (Decrease) in Fuel Cost	\$ (68,520)

Reflects the impact of the August-December 1994 inventory adjustments

Reflects the total January disallowance of \$616,741.

## <u>FEBRUARY 1995</u> - Total Amount of Prospective Disallowance Per Big Rivers' FAC Report = \$517,369 Jurisdictional Component = \$423,725

# Wilson Inventory - February 1995 - Per Big Rivers' Back-up Report

Beginning Inventory	<u>TONS</u> 265,558	<u>AMOUNT</u> \$8,917,334	PER TON \$33.5796	
Purchases (As Recorded)	97,799	3,395,469	34.7187	
Sub-total (As Recorded)	363,357	12,312,803	33.8862	
Less: Amount Burned	116,636	3,952,351	33.8862	
Ending Inventory	246,721	8,360,452	33.8862	
Contract 527 Disallowance Per We	ighted Average	nventory Method		
Beginning Inventory	<u>TONS</u> 265,558	<u>AMOUNT</u> \$7,637,158 <sup>7</sup>	PER TON \$28.7589	
Purchases (Adj)	97,799	2,878,101 <sup>8</sup>	29.4287	
Sub-total (Adj)	363,357	10,515,259	28.9392	
Amount Burned (Adj)	116,636	3,375,352	28.9392	
Ending Inventory (Adj)	246,721	7,139,907	28.9392	
Impact on FAC Calculation (dollars)				
Amount Burned as Reported by BREC			\$3,952,351	
Less: Adjusted Amount Burned			<u>3,375,352</u>	
Change in the Amount Burned			\$ (576,999)	
Less: Jurisdictional Disallowance Reported by BREC			<u>423,725</u>	
Increase (Decrease) in Fuel Cost			\$ (153,274)	

Reflects the impact of the August 1994 - January 1995 inventory adjustments

<sup>&</sup>lt;sup>8</sup> Reflects the total February disallowance of \$517,369.

<u>MARCH 1995</u> - Total Amount of Prospective Disallowance Per Big Rivers' FAC Report = \$519,703 Jurisdictional Component = \$383,021

## Wilson Inventory - March 1995 - Per Big Rivers' Back-up Report

Beginning Inventory	<u>TONS</u> 246,721	<u>AMOUNT</u> \$8,360,452	<u>PER TON</u> \$33.8862	
Purchases (As Recorded)	98,032	3,430,156	34.9903	
Sub-total (As Recorded)	344,753	11,790,608	34.2002	
Less: Amount Burned	127,688	4,366,950	34.2002	
Ending Inventory	217,065	7,423,658	34.2002	
Contract 527 Disallowance Per Weigh	ted Inventory I	<u>Method</u>		
Beginning Inventory	<u>TONS</u> 246,721	AMOUNT \$7,139,907°	<u>PER TON</u> \$28.9392	
Purchases (Adj)	98,032	2,910,453 <sup>10</sup>	29.6888	
Sub-total (Adj)	344,753	10,050,360	29.1523	
Less: Amount Burned	127,688	3,722,405	29.1523	
Ending Inventory	217,065	6,327,955	29.1523	
Impact on FAC Calculation (dollars)				
Amount Burned as Reported by BREC	;		\$4,366,950	
Less: Adjusted Amount Burned			3,722,405	
Change in the Amount Burned			\$ (644,545)	
Less: Jurisdictional Disallowance Reported by BREC			<u>383,021</u>	

Increase (Decrease) in Fuel Cost

\$ (261,524)

Reflects the impact of August 1994 - February 1995 inventory adjustments

Reflects the total March disallowance of \$519,703.

<u>APRIL 1995</u> - Total Amount of Prospective Disallowance Per Big Rivers' FAC Report = \$619,998 Jurisdictional Component = \$415,399

## Wilson Inventory - April 1995 - Per Big Rivers' Back-up Report

Beginning Inventory	<u>TONS</u> 217,065	AMOUNT \$7,423,658	PER TON \$34.2002	
Purchases (As Recorded)	113,813	3,999,986	35.1452	
Sub-total (As Recorded)	330,878	11,423,644	34.5252	
Less: Amount Burned	109,804	3,791,012	34.5252	
Ending Inventory	221,074	7,632,632	34.5252	
Contract 527 Disallowance Per Weight	ed Average In	ventory Method		
Beginning Inventory	<u>TONS</u> 217,065	AMOUNT \$6,327,955 <sup>11</sup>	PER TON \$29.1523	
Purchases (Adj)	113,813	3,379,988 <sup>12</sup>	29.6977	
Sub-total (Adj)	330,878	9,707,943	29.3399	
Less: Amount Burned	109,804	3,221,644	29.3399	
Ending Inventory	221,074	6,486,299	29.3399	
Impact on FAC Calculation (dollars)				
Amount Burned as Reported by BREC			\$3,791,012	
Less: Adjusted Amount Burned			3,221,644	
Change in the Amount Burned			\$ (569,368)	
Less: Jurisdictional Disallowance Reported by BREC			415,399	
Increase (Decrease) in Fuel Cost			\$ (153,969)	

Reflects the impact of the August 1994 - March 1995 inventory adjustments

Reflects the total April disallowance of \$619,998.